

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Emmapathy K. K. K. Examiner #: 79271 Date: 7/29/02
Art Unit: 1623 Phone Number 30 5-4427 Serial Number: 69403289
Mail Box and Bldg/Room Location: 8208 Results Format Preferred (circle): PAPER DISK E-MAIL
8B19

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Controlled antiviral composition
Inventors (please provide full names): Peter Burke; Stephen Sculley

Earliest Priority Filing Date: _____

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Please search 1-18

Point of Contact:
Thomas G. Larson, Ph.D.
703-308-7309
CM1, Rm. 6 B 01

STAFF USE ONLY	Type of Search	Vendors and cost where applicable
Point of Contact: Searcher: <u>Thomas G. Larson, Ph.D.</u>	NA Sequence (#) _____	<u>STN</u> _____
Searcher Phone #: <u>703-308-7309</u>	AA Sequence (#) _____	Dialog _____
Searcher Location: <u>CM1, Rm. 6 B 01</u>	Structure (#) _____	Questel/Orbit _____
Date Searcher Picked Up: <u>7/29</u>	Bibliographic <u>X</u>	Dr.Link _____
Date Completed: <u>8/7</u>	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: _____	Fulltext _____	Sequence Systems _____
Clerical Prep Time: _____	Patent Family _____	WWW/Internet <u>NLM Medline MEDLINE</u>
Online Time: _____	Other _____	Other (specify) _____

=> FILE MEDLINE

FILE 'MEDLINE' ENTERED AT 18:53:57 ON 07 AUG 2002

FILE LAST UPDATED: 7 AUG 2002 (20020807/UP). FILE COVERS 1958 TO DATE.

On June 9, 2002, MEDLINE was reloaded. See HELP RLOAD for details.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2002 vocabulary. Enter HELP THESAURUS for details.

THIS FILE CONTAINS CAS REGISTRY NUMBERS FOR EASY AND ACCURATE SUBSTANCE IDENTIFICATION.

=> D QUE L8

(Display Query line 8)

L1 62511 SEA FILE=MEDLINE ABB=ON PLU=ON DEXTRAN SULFATE+PFT/CT OR
CHONDROITIN SULFATES+PFT/CT OR PENTOSAN SULFURIC POLYESTER+PFT/
CT OR GLYCOSAMINOGLYCANS+PFT/CT OR HYALURONIC ACID+PFT/CT

L3 13269 SEA FILE=MEDLINE ABB=ON PLU=ON BUFFERS+PFT/CT

L5 155342 SEA FILE=MEDLINE ABB=ON PLU=ON ANTIVIRAL AGENTS+NT, PFT/CT

L6 9 SEA FILE=MEDLINE ABB=ON PLU=ON L1 AND L3 AND L5

L8 1 SEA FILE=MEDLINE ABB=ON PLU=ON L6 AND HUMAN/CT AND PC/CT

PFT = preferred & forbidden terms

NT = Narrower terms

CT = controlled term index

PC = prevention & control

=> D QUE L9

L1 62511 SEA FILE=MEDLINE ABB=ON PLU=ON DEXTRAN SULFATE+PFT/CT OR
CHONDROITIN SULFATES+PFT/CT OR PENTOSAN SULFURIC POLYESTER+PFT/
CT OR GLYCOSAMINOGLYCANS+PFT/CT OR HYALURONIC ACID+PFT/CT

L2 257963 SEA FILE=MEDLINE ABB=ON PLU=ON ANTI-INFECTION AGENTS,
LOCAL+NT, PFT/CT

L3 13269 SEA FILE=MEDLINE ABB=ON PLU=ON BUFFERS+PFT/CT

L4 6 SEA FILE=MEDLINE ABB=ON PLU=ON L1 AND L2 AND L3

L9 0 SEA FILE=MEDLINE ABB=ON PLU=ON L4 AND PC/CT

index term for pentosan poly sulfide

=> D QUE L13

L1 62511 SEA FILE=MEDLINE ABB=ON PLU=ON DEXTRAN SULFATE+PFT/CT OR
CHONDROITIN SULFATES+PFT/CT OR PENTOSAN SULFURIC POLYESTER+PFT/
CT OR GLYCOSAMINOGLYCANS+PFT/CT OR HYALURONIC ACID+PFT/CT

L3 13269 SEA FILE=MEDLINE ABB=ON PLU=ON BUFFERS+PFT/CT

L10 56150 SEA FILE=MEDLINE ABB=ON PLU=ON SURFACE-ACTIVE AGENTS+NT, PFT/C
T

L11 9 SEA FILE=MEDLINE ABB=ON PLU=ON L1 AND L3 AND L10

L13 1 SEA FILE=MEDLINE ABB=ON PLU=ON L11 AND HUMAN/CT AND PC/CT

=> D QUE L17

L1 62511 SEA FILE=MEDLINE ABB=ON PLU=ON DEXTRAN SULFATE+PFT/CT OR
CHONDROITIN SULFATES+PFT/CT OR PENTOSAN SULFURIC POLYESTER+PFT/
CT OR GLYCOSAMINOGLYCANS+PFT/CT OR HYALURONIC ACID+PFT/CT

L3 13269 SEA FILE=MEDLINE ABB=ON PLU=ON BUFFERS+PFT/CT

L16 4054 SEA FILE=MEDLINE ABB=ON PLU=ON SPERMATOCIDAL AGENTS+NT, PFT/CT

L17 1 SEA FILE=MEDLINE ABB=ON PLU=ON L1 AND L3 AND L16

=> D QUE L20

L1 62511 SEA FILE=MEDLINE ABB=ON PLU=ON DEXTRAN SULFATE+PFT/CT OR
CHONDROITIN SULFATES+PFT/CT OR PENTOSAN SULFURIC POLYESTER+PFT/
CT OR GLYCOSAMINOGLYCANS+PFT/CT OR HYALURONIC ACID+PFT/CT

L5 155342 SEA FILE=MEDLINE ABB=ON PLU=ON ANTIVIRAL AGENTS+NT, PFT/CT

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L10 56150 SEA FILE=MEDLINE ABB=ON PLU=ON SURFACE-ACTIVE AGENTS+NT,PFT/CT
T
L14 16779 SEA FILE=MEDLINE ABB=ON PLU=ON NONOXYNOL+PFT/CT OR OCTOXYNOL+
PFT/CT OR ACYCLOVIR+NT,PFT/CT OR BENZALKONIUM+PFT/CT OR
BENZALKONIUM COMPOUNDS+NT,PFT/CT OR APROTININ+PFT/CT
L16 4054 SEA FILE=MEDLINE ABB=ON PLU=ON SPERMATOCIDAL AGENTS+NT,PFT/CT
L18 920 SEA FILE=MEDLINE ABB=ON PLU=ON ACRYLIC ACID POLYMER OR
ACRYLATE POLYMER OR POLY ACRYLIC OR POLYACRYLIC OR POLY
ACRYLATE OR POLYACRYLATE
L19 6 SEA FILE=MEDLINE ABB=ON PLU=ON L1 AND (L5 OR L10 OR L14 OR
L16) AND L18
L20 0 SEA FILE=MEDLINE ABB=ON PLU=ON L19 AND PC/CT

=> D QUE L22

L1 62511 SEA FILE=MEDLINE ABB=ON PLU=ON DEXTRAN SULFATE+PFT/CT OR
CHONDROITIN SULFATES+PFT/CT OR PENTOSAN SULFURIC POLYESTER+PFT/
CT OR GLYCOSAMINOGLYCANS+PFT/CT OR HYALURONIC ACID+PFT/CT
L5 155342 SEA FILE=MEDLINE ABB=ON PLU=ON ANTIVIRAL AGENTS+NT,PFT/CT
L10 56150 SEA FILE=MEDLINE ABB=ON PLU=ON SURFACE-ACTIVE AGENTS+NT,PFT/C
T
L14 16779 SEA FILE=MEDLINE ABB=ON PLU=ON NONOXYNOL+PFT/CT OR OCTOXYNOL+
PFT/CT OR ACYCLOVIR+NT,PFT/CT OR BENZALKONIUM+PFT/CT OR
BENZALKONIUM COMPOUNDS+NT,PFT/CT OR APROTININ+PFT/CT
L16 4054 SEA FILE=MEDLINE ABB=ON PLU=ON SPERMATOCIDAL AGENTS+NT,PFT/CT
L21 2379 SEA FILE=MEDLINE ABB=ON PLU=ON CONDOMS+PFT/CT
L22 0 SEA FILE=MEDLINE ABB=ON PLU=ON L1 AND (L5 OR L10 OR L14 OR
L16) AND L21

=> S L8 OR L13 OR L17

L113 1 L8 OR L13 OR L17

=> FILE EMBASE

FILE 'EMBASE' ENTERED AT 18:55:58 ON 07 AUG 2002

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FILE COVERS 1974 TO 25 Jul 2002 (20020725/ED)

EMBASE has been reloaded. Enter HELP RLOAD for details.

This file contains CAS Registry Numbers for easy and accurate
substance identification.

=> D QUE L28

L23 18666 SEA FILE=EMBASE ABB=ON PLU=ON DEXTRAN SULFATE+PFT/CT OR
CHONDROITIN SULFATES+PFT/CT OR PENTOSAN SULFURIC POLYESTER+PFT/
CT OR GLYCOSAMINOGLYCANS+PFT/CT OR HYALURONIC ACID+PFT/CT
L24 754154 SEA FILE=EMBASE ABB=ON PLU=ON ANTIINFECTIVE AGENT+NT,PFT/CT
L25 2356 SEA FILE=EMBASE ABB=ON PLU=ON L23 AND L24
L26 5756 SEA FILE=EMBASE ABB=ON PLU=ON BUFFER+PFT/CT
L27 7 SEA FILE=EMBASE ABB=ON PLU=ON L25 AND L26
L28 0 SEA FILE=EMBASE ABB=ON PLU=ON L27 AND PC/CT

=> D QUE L32

L23 18666 SEA FILE=EMBASE ABB=ON PLU=ON DEXTRAN SULFATE+PFT/CT OR
CHONDROITIN SULFATES+PFT/CT OR PENTOSAN SULFURIC POLYESTER+PFT/

CT OR GLYCOSAMINOGLYCANS+PFT/CT OR HYALURONIC ACID+PFT/CT
 L26 5756 SEA FILE=EMBASE ABB=ON PLU=ON BUFFER+PFT/CT
 L30 185288 SEA FILE=EMBASE ABB=ON PLU=ON ANTIVIRUS AGENT+NT,PFT/CT
 L31 3 SEA FILE=EMBASE ABB=ON PLU=ON L23 AND L26 AND L30
 L32 0 SEA FILE=EMBASE ABB=ON PLU=ON L31 AND PC/CT

=> D QUE L37

L23 18666 SEA FILE=EMBASE ABB=ON PLU=ON DEXTRAN SULFATE+PFT/CT OR
 CHONDROITIN SULFATES+PFT/CT OR PENTOSAN SULFURIC POLYESTER+PFT/
 CT OR GLYCOSAMINOGLYCANS+PFT/CT OR HYALURONIC ACID+PFT/CT
 L24 754154 SEA FILE=EMBASE ABB=ON PLU=ON ANTIINFECTIVE AGENT+NT,PFT/CT
 L26 5756 SEA FILE=EMBASE ABB=ON PLU=ON BUFFER+PFT/CT
 L33 55326 SEA FILE=EMBASE ABB=ON PLU=ON SURFACTANT+NT,PFT/CT
 L34 7 SEA FILE=EMBASE ABB=ON PLU=ON L23 AND L26 AND L33
 L37 3 SEA FILE=EMBASE ABB=ON PLU=ON L34 AND L24

=> D QUE L41

L23 18666 SEA FILE=EMBASE ABB=ON PLU=ON DEXTRAN SULFATE+PFT/CT OR
 CHONDROITIN SULFATES+PFT/CT OR PENTOSAN SULFURIC POLYESTER+PFT/
 CT OR GLYCOSAMINOGLYCANS+PFT/CT OR HYALURONIC ACID+PFT/CT
 L26 5756 SEA FILE=EMBASE ABB=ON PLU=ON BUFFER+PFT/CT
 L40 622 SEA FILE=EMBASE ABB=ON PLU=ON NONOXINOL 9+PFT/CT OR OCTOXINOL
 9+PFT/CT
 L41 1 SEA FILE=EMBASE ABB=ON PLU=ON L23 AND L26 AND L40

=> D QUE L43

L23 18666 SEA FILE=EMBASE ABB=ON PLU=ON DEXTRAN SULFATE+PFT/CT OR
 CHONDROITIN SULFATES+PFT/CT OR PENTOSAN SULFURIC POLYESTER+PFT/
 CT OR GLYCOSAMINOGLYCANS+PFT/CT OR HYALURONIC ACID+PFT/CT
 L26 5756 SEA FILE=EMBASE ABB=ON PLU=ON BUFFER+PFT/CT
 L42 6416 SEA FILE=EMBASE ABB=ON PLU=ON SPERMICIDAL AGENT+NT,PFT/CT
 L43 2 SEA FILE=EMBASE ABB=ON PLU=ON L23 AND L26 AND L42

=> D QUE L50

L23 18666 SEA FILE=EMBASE ABB=ON PLU=ON DEXTRAN SULFATE+PFT/CT OR
 CHONDROITIN SULFATES+PFT/CT OR PENTOSAN SULFURIC POLYESTER+PFT/
 CT OR GLYCOSAMINOGLYCANS+PFT/CT OR HYALURONIC ACID+PFT/CT
 L24 754154 SEA FILE=EMBASE ABB=ON PLU=ON ANTIINFECTIVE AGENT+NT,PFT/CT
 L30 185288 SEA FILE=EMBASE ABB=ON PLU=ON ANTIVIRUS AGENT+NT,PFT/CT
 L33 55326 SEA FILE=EMBASE ABB=ON PLU=ON SURFACTANT+NT,PFT/CT
 L38 20039 SEA FILE=EMBASE ABB=ON PLU=ON NONOXYNOL+PFT/CT OR OCTOXYNOL+P
 FT/CT OR ACYCLOVIR+NT,PFT/CT OR BENZALKONIUM+PFT/CT OR
 BENZALKONIUM COMPOUNDS+NT,PFT/CT OR APROTININ+PFT/CT
 L40 622 SEA FILE=EMBASE ABB=ON PLU=ON NONOXINOL 9+PFT/CT OR OCTOXINOL
 9+PFT/CT
 L44 1382 SEA FILE=EMBASE ABB=ON PLU=ON POLYACRYLIC ACID+NT,PFT/CT
 L45 19 SEA FILE=EMBASE ABB=ON PLU=ON L23 AND (L24 OR L30 OR L33 OR
 L38 OR L40) AND L44
 L46 8 SEA FILE=EMBASE ABB=ON PLU=ON L45 AND HUMAN/CT
 L49 18367 SEA FILE=EMBASE ABB=ON PLU=ON DRUG DELIVERY SYSTEM/CT
 L50 4 SEA FILE=EMBASE ABB=ON PLU=ON L46 AND L49

=> D QUE L51

L23 18666 SEA FILE=EMBASE ABB=ON PLU=ON DEXTRAN SULFATE+PFT/CT OR
 CHONDROITIN SULFATES+PFT/CT OR PENTOSAN SULFURIC POLYESTER+PFT/

CT OR GLYCOSAMINOGLYCANS+PFT/CT OR HYALURONIC ACID+PFT/CT
 L24 754154 SEA FILE=EMBASE ABB=ON PLU=ON ANTIINFECTIVE AGENT+NT,PFT/CT
 L30 185288 SEA FILE=EMBASE ABB=ON PLU=ON ANTIVIRUS AGENT+NT,PFT/CT
 L33 55326 SEA FILE=EMBASE ABB=ON PLU=ON SURFACTANT+NT,PFT/CT
 L38 20039 SEA FILE=EMBASE ABB=ON PLU=ON NONOXYNOL+PFT/CT OR OCTOXYNOL+P
 FT/CT OR ACYCLOVIR+NT,PFT/CT OR BENZALKONIUM+PFT/CT OR
 BENZALKONIUM COMPOUNDS+NT,PFT/CT OR APROTININ+PFT/CT
 L40 622 SEA FILE=EMBASE ABB=ON PLU=ON NONOXINOL 9+PFT/CT OR OCTOXINOL
 9+PFT/CT
 L44 1382 SEA FILE=EMBASE ABB=ON PLU=ON POLYACRYLIC ACID+NT,PFT/CT
 L45 19 SEA FILE=EMBASE ABB=ON PLU=ON L23 AND (L24 OR L30 OR L33 OR
 L38 OR L40) AND L44
 L47 5 SEA FILE=EMBASE ABB=ON PLU=ON L45 AND PD/CT
 L49 18367 SEA FILE=EMBASE ABB=ON PLU=ON DRUG DELIVERY SYSTEM/CT
 L51 2 SEA FILE=EMBASE ABB=ON PLU=ON L47 AND L49

=> D QUE L54

L23 18666 SEA FILE=EMBASE ABB=ON PLU=ON DEXTRAN SULFATE+PFT/CT OR
 CHONDROITIN SULFATES+PFT/CT OR PENTOSAN SULFURIC POLYESTER+PFT/
 CT OR GLYCOSAMINOGLYCANS+PFT/CT OR HYALURONIC ACID+PFT/CT
 L24 754154 SEA FILE=EMBASE ABB=ON PLU=ON ANTIINFECTIVE AGENT+NT,PFT/CT
 L30 185288 SEA FILE=EMBASE ABB=ON PLU=ON ANTIVIRUS AGENT+NT,PFT/CT
 L33 55326 SEA FILE=EMBASE ABB=ON PLU=ON SURFACTANT+NT,PFT/CT
 L38 20039 SEA FILE=EMBASE ABB=ON PLU=ON NONOXYNOL+PFT/CT OR OCTOXYNOL+P
 FT/CT OR ACYCLOVIR+NT,PFT/CT OR BENZALKONIUM+PFT/CT OR
 BENZALKONIUM COMPOUNDS+NT,PFT/CT OR APROTININ+PFT/CT
 L40 622 SEA FILE=EMBASE ABB=ON PLU=ON NONOXINOL 9+PFT/CT OR OCTOXINOL
 9+PFT/CT
 L44 1382 SEA FILE=EMBASE ABB=ON PLU=ON POLYACRYLIC ACID+NT,PFT/CT
 L53 3678 SEA FILE=EMBASE ABB=ON PLU=ON CONDOM+PFT/CT
 L54 0 SEA FILE=EMBASE ABB=ON PLU=ON L23 AND (L24 OR L30 OR L33 OR
 L38 OR L40 OR L44) AND L53

=> S L37 OR L41 OR L43 OR L50 OR L51

L114 9 L37 OR L41 OR L43 OR L50 OR L51

=> FILE HCAPLUS

FILE 'HCAPLUS' ENTERED AT 18:57:37 ON 07 AUG 2002

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FILE COVERS 1907 - 7 Aug 2002 VOL 137 ISS 6

FILE LAST UPDATED: 6 Aug 2002 (20020806/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> D QUE L66

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L55      6420 SEA FILE=HCAPLUS ABB=ON  PLU=ON  CHONDROITIN SULFATE/CT OR
          CHONDROITIN 4-SULFATE/CT OR CHONDROITIN 6-SULFATE/CT
L56      17915 SEA FILE=HCAPLUS ABB=ON  PLU=ON  GLYCOSAMINOGLYCANS+NT, PFT/CT
L57      10749 SEA FILE=HCAPLUS ABB=ON  PLU=ON  DEXTRAN SULFATE+PFT/CT OR
          "PENTOSANS (L) SULFATES"+NT, PFT/CT OR HYALURONIC ACID+PFT/CT
L58      28645 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L55 OR L56 OR L57)
L60      162793 SEA FILE=HCAPLUS ABB=ON  PLU=ON  ANTIMICROBIAL AGENTS+NT, PFT/CT

L63      11014 SEA FILE=HCAPLUS ABB=ON  PLU=ON  SEXUALLY TRANSMITTED DISEASES+
          NT, PFT/CT
L65      411 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L63 (L) (PREVENT? OR PROPHYLA?
          OR DEFEN? OR SAFE?)
L66      5 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L58 AND L60 AND L65
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=> D QUE L67

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L55      6420 SEA FILE=HCAPLUS ABB=ON  PLU=ON  CHONDROITIN SULFATE/CT OR
          CHONDROITIN 4-SULFATE/CT OR CHONDROITIN 6-SULFATE/CT
L56      17915 SEA FILE=HCAPLUS ABB=ON  PLU=ON  GLYCOSAMINOGLYCANS+NT, PFT/CT
L57      10749 SEA FILE=HCAPLUS ABB=ON  PLU=ON  DEXTRAN SULFATE+PFT/CT OR
          "PENTOSANS (L) SULFATES"+NT, PFT/CT OR HYALURONIC ACID+PFT/CT
L58      28645 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L55 OR L56 OR L57)
L59      7360 SEA FILE=HCAPLUS ABB=ON  PLU=ON  BUFFERS+PFT/CT
L60      162793 SEA FILE=HCAPLUS ABB=ON  PLU=ON  ANTIMICROBIAL AGENTS+NT, PFT/CT

L61      10 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L58 AND L59 AND L60
L63      11014 SEA FILE=HCAPLUS ABB=ON  PLU=ON  SEXUALLY TRANSMITTED DISEASES+
          NT, PFT/CT
L67      1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L61 AND L63
```

=> D QUE L72

```
L55      6420 SEA FILE=HCAPLUS ABB=ON  PLU=ON  CHONDROITIN SULFATE/CT OR
          CHONDROITIN 4-SULFATE/CT OR CHONDROITIN 6-SULFATE/CT
L56      17915 SEA FILE=HCAPLUS ABB=ON  PLU=ON  GLYCOSAMINOGLYCANS+NT, PFT/CT
L57      10749 SEA FILE=HCAPLUS ABB=ON  PLU=ON  DEXTRAN SULFATE+PFT/CT OR
          "PENTOSANS (L) SULFATES"+NT, PFT/CT OR HYALURONIC ACID+PFT/CT
L58      28645 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L55 OR L56 OR L57)
L68      242 SEA FILE=HCAPLUS ABB=ON  PLU=ON  "CONTRACEPTIVES (L) CONDOMS"+P
          FT/CT
L69      125310 SEA FILE=HCAPLUS ABB=ON  PLU=ON  DETERGENTS+NT, PFT/CT OR
          SURFACTANTS+PFT/CT
L70      553 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L58 AND L69
L72      0 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L70 AND L68
```

=> D QUE L74

```
L55      6420 SEA FILE=HCAPLUS ABB=ON  PLU=ON  CHONDROITIN SULFATE/CT OR
          CHONDROITIN 4-SULFATE/CT OR CHONDROITIN 6-SULFATE/CT
L56      17915 SEA FILE=HCAPLUS ABB=ON  PLU=ON  GLYCOSAMINOGLYCANS+NT, PFT/CT
L57      10749 SEA FILE=HCAPLUS ABB=ON  PLU=ON  DEXTRAN SULFATE+PFT/CT OR
          "PENTOSANS (L) SULFATES"+NT, PFT/CT OR HYALURONIC ACID+PFT/CT
L58      28645 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L55 OR L56 OR L57)
```

L59	7360	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	BUFFERS+PFT/CT
L63	11014	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	SEXUALLY TRANSMITTED DISEASES+ NT, PFT/CT
L69	125310	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	DETERGENTS+NT, PFT/CT OR SURFACTANTS+PFT/CT
L70	553	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	L58 AND L69
L73	30	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	L70 AND L59
L74	0	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	L73 AND L63

=> D QUE L78

L55	6420	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	CHONDROITIN SULFATE/CT OR CHONDROITIN 4-SULFATE/CT OR CHONDROITIN 6-SULFATE/CT
L56	17915	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	GLYCOSAMINOGLYCANS+NT, PFT/CT
L57	10749	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	DEXTRAN SULFATE+PFT/CT OR "PENTOSANS (L) SULFATES"+NT, PFT/CT OR HYALURONIC ACID+PFT/CT
L58	28645	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	(L55 OR L56 OR L57)
L63	11014	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	SEXUALLY TRANSMITTED DISEASES+ NT, PFT/CT
L76	456	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	"CONTRACEPTIVES (L) SPERMICIDA L"+PFT/CT
L77	11	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	L58 AND L76
L78	2	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	L77 AND L63

=> D QUE L79

L55	6420	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	CHONDROITIN SULFATE/CT OR CHONDROITIN 4-SULFATE/CT OR CHONDROITIN 6-SULFATE/CT
L56	17915	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	GLYCOSAMINOGLYCANS+NT, PFT/CT
L57	10749	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	DEXTRAN SULFATE+PFT/CT OR "PENTOSANS (L) SULFATES"+NT, PFT/CT OR HYALURONIC ACID+PFT/CT
L58	28645	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	(L55 OR L56 OR L57)
L68	242	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	"CONTRACEPTIVES (L) CONDOMS"+P FT/CT
L76	456	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	"CONTRACEPTIVES (L) SPERMICIDA L"+PFT/CT
L77	11	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	L58 AND L76
L79	0	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	L77 AND L68

=> D QUE L83

L55	6420	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	CHONDROITIN SULFATE/CT OR CHONDROITIN 4-SULFATE/CT OR CHONDROITIN 6-SULFATE/CT
L56	17915	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	GLYCOSAMINOGLYCANS+NT, PFT/CT
L57	10749	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	DEXTRAN SULFATE+PFT/CT OR "PENTOSANS (L) SULFATES"+NT, PFT/CT OR HYALURONIC ACID+PFT/CT
L58	28645	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	(L55 OR L56 OR L57)
L59	7360	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	BUFFERS+PFT/CT
L63	11014	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	SEXUALLY TRANSMITTED DISEASES+ NT, PFT/CT
L68	242	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	"CONTRACEPTIVES (L) CONDOMS"+P FT/CT
L76	456	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	"CONTRACEPTIVES (L) SPERMICIDA L"+PFT/CT
L80	16521	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	26027-38-3#/RN OR 9002-93-1#/R N OR 59277-89-3#/RN OR 8001-54-5#/RN OR 9087-70-1#/RN
L81	131	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	L58 AND L80
L82	6	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	L81 AND L59
L83	1	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	L82 AND (L63 OR L68 OR L76)

=> D QUE L89

L55 6420 SEA FILE=HCAPLUS ABB=ON PLU=ON CHONDROITIN SULFATE/CT OR
CHONDROITIN 4-SULFATE/CT OR CHONDROITIN 6-SULFATE/CT
L56 17915 SEA FILE=HCAPLUS ABB=ON PLU=ON GLYCOSAMINOGLYCANS+NT,PFT/CT
L57 10749 SEA FILE=HCAPLUS ABB=ON PLU=ON DEXTRAN SULFATE+PFT/CT OR
"PENTOSANS (L) SULFATES"+NT,PFT/CT OR HYALURONIC ACID+PFT/CT
L58 28645 SEA FILE=HCAPLUS ABB=ON PLU=ON (L55 OR L56 OR L57)
L63 11014 SEA FILE=HCAPLUS ABB=ON PLU=ON SEXUALLY TRANSMITTED DISEASES+
NT,PFT/CT
L68 242 SEA FILE=HCAPLUS ABB=ON PLU=ON "CONTRACEPTIVES (L) CONDOMS"+P
FT/CT
L76 456 SEA FILE=HCAPLUS ABB=ON PLU=ON "CONTRACEPTIVES (L) SPERMICIDA
L"+PFT/CT
L80 16521 SEA FILE=HCAPLUS ABB=ON PLU=ON 26027-38-3#/RN OR 9002-93-1#/R
N OR 59277-89-3#/RN OR 8001-54-5#/RN OR 9087-70-1#/RN
L84 12676 SEA FILE=HCAPLUS ABB=ON PLU=ON "POLY(ACRYLIC ACID)"+PFT/CT
OR POLYACRYLATE+PFT/CT
L88 5 SEA FILE=HCAPLUS ABB=ON PLU=ON L58 AND L80 AND L84
L89 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L88 AND (L63 OR L68 OR L76)

=> S L66 OR L67 OR L78 OR L83 OR L89

L115 6 L66 OR L67 OR L78 OR L83 OR L89

=> FILE WPIDS

FILE 'WPIDS' ENTERED AT 18:59:41 ON 07 AUG 2002

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FILE LAST UPDATED: 02 AUG 2002

<20020802/UP>

MOST RECENT DERWENT UPDATE

200249

<200249/DW>

DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

>>> The BATCH option for structure searches has been
enabled in WPINDEX/WPIDS and WPIX >>>

>>> PATENT IMAGES AVAILABLE FOR PRINT AND DISPLAY >>>

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>>> FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE,
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GUIDES, PLEASE VISIT:
http://www.derwent.com/userguides/dwpi_guide.html <<<

=> D QUE L102

L90 532 SEA FILE=WPIDS ABB=ON PLU=ON (DEXTRAN OR CHONDROITIN OR
PENTOSAN) (3A) (?SULF?)
L91 4344 SEA FILE=WPIDS ABB=ON PLU=ON GLUCOSAMINE OR GLUCOSAMINOGLYCAN
OR GLYCOSAMINOGLYCAN OR HYALURON?
L92 4643 SEA FILE=WPIDS ABB=ON PLU=ON L90 OR L91
L93 27953 SEA FILE=WPIDS ABB=ON PLU=ON MICROCID? OR ANTIINFECT? OR
ANTI INFECT? OR ANTIVIRAL OR ANTI VIRAL OR ANTI MICROBIAL OR
ANTIMICROBIAL
L94 233 SEA FILE=WPIDS ABB=ON PLU=ON L92 AND L93
L95 198 SEA FILE=WPIDS ABB=ON PLU=ON L94 AND (BUFFER? OR ACID? OR

PH)

L96 26404 SEA FILE=WPIDS ABB=ON PLU=ON SEX? OR STD OR PROPHYLA? OR
CONDOM OR PENIS OR VAGIN?

L97 22 SEA FILE=WPIDS ABB=ON PLU=ON L95 AND L96

L100 120177 SEA FILE=WPIDS ABB=ON PLU=ON DETERGENT OR SURFACT? OR
SURFACE ACTIVE

L102 6 SEA FILE=WPIDS ABB=ON PLU=ON L97 AND L100

=> D QUE L105

L90 532 SEA FILE=WPIDS ABB=ON PLU=ON (DEXTRAN OR CHONDROITIN OR
PENTOSAN) (3A) (?SULF?)

L91 4344 SEA FILE=WPIDS ABB=ON PLU=ON GLUCOSAMINE OR GLUCOSAMINOGLYCAN
OR GLYCOSAMINOGLYCAN OR HYALURON?

L92 4643 SEA FILE=WPIDS ABB=ON PLU=ON L90 OR L91

L100 120177 SEA FILE=WPIDS ABB=ON PLU=ON DETERGENT OR SURFACT? OR
SURFACE ACTIVE

L103 851 SEA FILE=WPIDS ABB=ON PLU=ON NONOXYNOL OR NONOXINOL OR
OCTOXYNOL OR OCTOXINOL OR ACYCLOVIR OR BENALKONIUM OR APROTININ

L104 29 SEA FILE=WPIDS ABB=ON PLU=ON L92 AND L103

L105 5 SEA FILE=WPIDS ABB=ON PLU=ON L104 AND L100

=> D QUE L110

L90 532 SEA FILE=WPIDS ABB=ON PLU=ON (DEXTRAN OR CHONDROITIN OR
PENTOSAN) (3A) (?SULF?)

L91 4344 SEA FILE=WPIDS ABB=ON PLU=ON GLUCOSAMINE OR GLUCOSAMINOGLYCAN
OR GLYCOSAMINOGLYCAN OR HYALURON?

L92 4643 SEA FILE=WPIDS ABB=ON PLU=ON L90 OR L91

L93 27953 SEA FILE=WPIDS ABB=ON PLU=ON MICROCID? OR ANTIINFECT? OR
ANTI INFECT? OR ANTIVIRAL OR ANTI VIRAL OR ANTI MICROBIAL OR
ANTIMICROBIAL

L94 233 SEA FILE=WPIDS ABB=ON PLU=ON L92 AND L93

L96 26404 SEA FILE=WPIDS ABB=ON PLU=ON SEX? OR STD OR PROPHYLA? OR
CONDOM OR PENIS OR VAGIN?

L98 11442 SEA FILE=WPIDS ABB=ON PLU=ON SEXUAL? OR STD OR CONDOM OR
PENIS OR VAGIN?

L106 30416 SEA FILE=WPIDS ABB=ON PLU=ON POLYACRYLATE OR POLY ACRYLATE
OR POLY ACRYLIC ACID OR POLYACRYLIC ACID OR (ACRYLIC ACID (3A)
(POLYMER# OR HOMOPOLYMER# OR HOMO POLYMER#))

L108 18 SEA FILE=WPIDS ABB=ON PLU=ON L94 AND L106

L109 2 SEA FILE=WPIDS ABB=ON PLU=ON L108 AND L96

L110 1 SEA FILE=WPIDS ABB=ON PLU=ON L109 AND L98

=> D QUE L112

L90 532 SEA FILE=WPIDS ABB=ON PLU=ON (DEXTRAN OR CHONDROITIN OR
PENTOSAN) (3A) (?SULF?)

L91 4344 SEA FILE=WPIDS ABB=ON PLU=ON GLUCOSAMINE OR GLUCOSAMINOGLYCAN
OR GLYCOSAMINOGLYCAN OR HYALURON?

L92 4643 SEA FILE=WPIDS ABB=ON PLU=ON L90 OR L91

L93 27953 SEA FILE=WPIDS ABB=ON PLU=ON MICROCID? OR ANTIINFECT? OR
ANTI INFECT? OR ANTIVIRAL OR ANTI VIRAL OR ANTI MICROBIAL OR
ANTIMICROBIAL

L94 233 SEA FILE=WPIDS ABB=ON PLU=ON L92 AND L93

L95 198 SEA FILE=WPIDS ABB=ON PLU=ON L94 AND (BUFFER? OR ACID? OR
PH)

L111 437 SEA FILE=WPIDS ABB=ON PLU=ON SPERMATOCID? OR SPERMACID? OR
SPERMICID?

L112 2 SEA FILE=WPIDS ABB=ON PLU=ON L95 AND L111

=> S L102 OR L105 OR L110 OR L112
L116 9 L102 OR L105 OR L110 OR L112

=> DUP REM L113 L114 L115 L116
FILE 'MEDLINE' ENTERED AT 19:01:37 ON 07 AUG 2002

FILE 'EMBASE' ENTERED AT 19:01:37 ON 07 AUG 2002
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FILE 'WPIDS' ENTERED AT 19:01:37 ON 07 AUG 2002
COPYRIGHT (C) 2002 THOMSON DERWENT
PROCESSING COMPLETED FOR L113
PROCESSING COMPLETED FOR L114
PROCESSING COMPLETED FOR L115
PROCESSING COMPLETED FOR L116
L117 24 DUP REM L113 L114 L115 L116 (1 DUPLICATE REMOVED)

=> D IBIB ABS 1-24

L117 ANSWER 1 OF 24 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:450341 HCAPLUS
DOCUMENT NUMBER: 137:15765
TITLE: Use of Iron and Manganese complexes for preventing and
treating HIV-mediated central nervous system damage
INVENTOR(S): Salvemini, Daniela
PATENT ASSIGNEE(S): Metaphore Pharmaceuticals, Inc, USA
SOURCE: U.S. Pat. Appl. Publ., 21 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002072512	A1	20020613	US 2001-951855	20010913
PRIORITY APPLN. INFO.:			US 2000-254405P P	20001208

OTHER SOURCE(S): MARPAT 137:15765

AB The invention relates to methods of preventing and/or treating HIV-mediated central nervous system damage. The method comprises administering therapeutic amts. of non-proteinaceous catalysts for the dismutation of superoxide to a subject either alone or in combination with a HIV anti-viral agent. The compds. of the invention are particularly suitable for treating and/or preventing AIDS Dementia Complex.

L117 ANSWER 2 OF 24 WPIDS (C) 2002 THOMSON DERWENT
ACCESSION NUMBER: 2002-361781 [39] WPIDS
DOC. NO. CPI: C2002-102302
TITLE: Microparticles for controlling an immune and autoimmune responses by regulating an the immune system and delivering bioactive substances, useful for treating diabetes.

DERWENT CLASS: A96 B04 D16
 INVENTOR(S): BOT, A; DELLAMARY, L; SMITH, D J; WOODS, C M
 PATENT ASSIGNEE(S): (ALLI-N) ALLIANCE PHARM CORP
 COUNTRY COUNT: 96
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002009674	A2	20020207	(200239)*	EN	78
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
AU 2001080934	A	20020213	(200239)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002009674	A2	WO 2001-US24038	20010730
AU 2001080934	A	AU 2001-80934	20010730

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001080934	A Based on	WO 200209674

PRIORITY APPLN. INFO: US 2000-221544P 20000728

AN 2002-361781 [39] WPIDS

AB WO 200209674 A UPAB: 20020621

NOVELTY - Microparticle compositions (A) for controlling an immune response/autoimmune disorder by down regulating a pathogenic arm of the immune system and/or up regulating the suppressor arm of the immune system, and (B) delivering a bioactive substance where it is desired to limit the immune response to the bioactive substance, are new.

DETAILED DESCRIPTION - A microparticle composition (A) for controlling an immune response/autoimmune disorder by down regulating a pathogenic arm of the immune system, or up regulating the suppressor arm of the immune system, or simultaneously down regulating the pathogenic arm and up regulating the suppressor arm of the immune system comprising:

(1) a **surfactant** or mixture of **surfactants** comprising approximately 1-80% of the weight of the total microparticle composition;

(2) at least one excipient selected from the group consisting of carbohydrates, polyols, salts, proteins and synthetic polymers; and

(3) at least one antigen.

A microparticle (B) composition for delivering a bioactive substance where it is desired to limit the immune response to the bioactive substance, comprising:

(1) a water soluble **surfactant** selected from the group consisting of: phosphatides, non- ionic **surfactants**, anionic **surfactants**, cationic **surfactants**, proteins, amino acids and oligoamino acids;

(2) a water soluble excipient comprising a weight ratio of 1-90% of the total weight of the composition (the water soluble excipients is selected from lactose, mannitol, mannose, sorbitol, galactitol, sucrose, trehalose, raffinose, maltose, glucose, saponins, osmotic agents such as

sodium chloride, potassium chloride, calcium chloride, magnesium chloride, zinc chloride, buffers such as PBS, acetate, citrate, TRIS and amino acids such as glycine and alanine), human, egg or bovine albumin, chollagen, oligopeptides, oligoleucine, oligoalanine, gelatin, glycoproteins, PLGA's, polylactides, polyglycolides, PVA's, PVP's, polyacrylics, carbomers, polyanhydrides, polyphosphoethers, polyurethanes, polyesters and polyphosphazenes; and

(3) a bioactive substance for inducing an immune response.

INDEPENDENT CLAIMS are also included for the following:

(1) a method (I) of treating a patient suffering from, or preventing the development of Type 1 diabetes, by administration of the microparticles (A);

(2) a method (II) of enhancing the Th2 response of an individual suffering from an autoimmune disorder comprising administration of the microparticles (A);

(3) a method (III) of enhancing the IL-4 production of an individual suffering from an autoimmune disorder comprising administration of a therapeutically effective amount of the microparticles (A);

(4) a method (IV) of tolerizing pathogenic T-cells in an individual suffering from autoimmune diabetes comprising administration of the microparticles (A); and

(5) a method (V) of preventing the onset of Type 1 diabetes by administration of the microparticles (A).

ACTIVITY - Immunomodulatory; immunostimulant; immunosuppressive; antidiabetic.

Retentive (10% lactose, 25% hIgG and 64% DPPC+1% DiC16PE-Texas Red) and non-retentive particles (1% tyloxapol, 10% lactose, 25% hIgG and 63% DPPC+Ca2++1% DiC1 6PE-Texas Red) (SDLMs constructed according to procedure described in the specification, using excipients mentioned in this example) were administered to anesthetized Sprague-Dawley rats, using an Insufflator device inserted into the trachea. Prior to administration, the device was loaded with 60 microns l of 20mg/ml formulation suspended in perflubron. Out of 60 microns l, 35 microns l were expelled by the device as micron-size aerosols. One hour after administration, the rats (n=6 / group) were sacrificed and the bronchoalveolar macrophages harvested, washed and analyzed using a FACS Calibur. The percentage of Texas Red positive cells was measured using cells from naive rats as reference. The results are expressed as % Texas Red+ cells (means plus or minus SEM).

In parallel, the lung circulation was perfused via the right ventricle. The lungs were harvested, homogenized in 10 microns g/ml of aprotinin (10ml final volume) and the concentration of hIgG measured by capture ELISA. Wells coated with 1:500 mouse anti-human k and lambda chains antibodies were used, blocked subsequently with 30% SeaBlock. After the centrifugation of tissue homogenates (5 minutes at 10000 RPM), various dilutions of supernatants were incubated for 2 hours at room temperature. Following extensive washing, the wells were incubated for 1 hour at room temperature with 1:1000 goat anti-human IgG conjugated with alkaline phosphatase. Subsequently, the assay was developed using pNPP substrate according to manufacturer's instructions. The OD was read at 405nm and the concentration of hIgG calculated by interpolation using a standard curve constructed with hlgG.

The results were expressed as total amount of lgG in the lung interstitial tissue (means plus or minus SEM). The results show that co-formulation of various excipients was associated with differential clearance of microparticles by phagocytes. Since this clearance is Fc gamma R-mediated the results demonstrated that co-aggregation of IgG with lipid excipients is greatly limited by addition of tyloxapol and modification of excipients.

MECHANISM OF ACTION - Vaccine.

USE - (A) May be used for:

- (1) treating (I) a patient suffering from, or preventing the development of Type 1 diabetes;
- (2) enhancing (II) the Th2 response of an individual suffering from an autoimmune disorder;
- (3) enhancing (III) the IL-4 production of an individual suffering from an autoimmune disorder comprising administration of a therapeutically effective amount of the microparticles (A);
- (4) tolerizing (IV) pathogenic T-cells in an individual suffering from autoimmune diabetes comprising administration of the microparticles (A); and
- (5) preventing (V) the onset of Type 1 diabetes by administration of the microparticles (A).
- (B) May be used for delivering a bioactive substance where it is desired to limit the immune response to the bioactive substance (claimed).
- Dwg.0/31

L117 ANSWER 3 OF 24 WPIDS (C) 2002 THOMSON DERWENT
 ACCESSION NUMBER: 2002-216998 [27] WPIDS
 CROSS REFERENCE: 2002-216996 [14]; 2002-217001 [14]
 DOC. NO. CPI: C2002-066341
 TITLE: Hydrogel film used for improving wound healing and delivering pharmaceuticals, comprises polymer including polysaccharide modified by hydrazide or **glycosaminoglycan** compounds with dialdehyde crosslinker.
 DERWENT CLASS: A11 A96 B07 C07 D22
 INVENTOR(S): KIRKER, K R; LUO, Y; PRESTWICH, G D
 PATENT ASSIGNEE(S): (UTAH) UNIV UTAH RES FOUND
 COUNTRY COUNT: 96
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002006373	A1	20020124	(200227)*	EN	90
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
AU 2001078943	A	20020130	(200236)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002006373	A1	WO 2001-US22556	20010717
AU 2001078943	A	AU 2001-78943	20010717

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001078943	A Based on	WO 200206373

PRIORITY APPLN. INFO: US 2000-218725P 20000717
 AN 2002-216998 [27] WPIDS
 CR 2002-216996 [14]; 2002-217001 [14]
 AB WO 200206373 A UPAB: 20020429
 NOVELTY - Hydrogel film comprises a polymer having at least one unit (I)

including a polysaccharide group modified by hydrazide or **glycosaminoglycan** compounds (II) with dialdehyde crosslinker.

DETAILED DESCRIPTION - Hydrogel film comprises a polymer having at least one unit of formula (I) including a polysaccharide group modified by hydrazide or **glycosaminoglycan** compounds of formula (Ax-By-Ax)_j (II) with a dialdehyde crosslinker.

X, Y = a polysaccharide;

Z, R1-R8 = H, polysaccharyl, polyether group, or hydrocarbyl or heterohydrocarbyl (both optionally substituted);

A = **glycosaminoglycan** having at least one hydrazide group;

B = a dialdehyde crosslinker;

x = 1-100;

y = 1-10, and

j = 10-1000000000.

INDEPENDENT CLAIMS are included for the following:

(1) production of the hydrogel film comprising the polymer having at least one unit (I) which comprises reacting a modified polysaccharide having at least one hydrazide group with a polyaldehyde;

(2) a pharmaceutical composition comprising a pharmaceutical compound and the hydrogel film comprising the polymer having at least one unit (I);

(3) production of the pharmaceutical composition which comprises:

(i) admixing the pharmaceutical compound with the hydrogel film, or

(ii) admixing the pharmaceutical compound with a modified polysaccharide having at least one hydrazide group, and reacting the modified polysaccharide with a polyaldehyde, and

(4) a method for purifying a modified polysaccharide having at least one hydrazide group which comprises dialyzing the modified polysaccharide in the presence of a salt.

ACTIVITY - Vulnerary; Antiinflammatory.

MECHANISM OF ACTION - None given in the source material.

USE - Used for wound and burn healing, tissue regeneration and drug and small molecule delivery. The film is used for treating periodontal disease.

ADVANTAGE - The film may be placed directly in or on any biological system without purification. The film provides a surface over which cells can grow and is malleable and can be manipulated to conform to contours of tissue defects.

Dwg.0/12

L117 ANSWER 4 OF 24 WPIDS (C) 2002 THOMSON DERWENT

ACCESSION NUMBER: 2002-268856 [31] WPIDS

DOC. NO. CPI: C2002-079688

TITLE: **Surfactant-free oil-in-water wax dispersion**
useful in topical, anal, **vaginal**, ophthalmic,
nasal otic application comprises a hydrophobic phase
having wax mixed with an aqueous phase.

DERWENT CLASS: A96 B05 D21

INVENTOR(S): CECCOLI, J D; COLEMAN, T; CRAWFORD, T K; ROSS, M;
WILMOTT, J M

PATENT ASSIGNEE(S): (COLL-N) COLLABORATIVE TECHNOLOGIES INC

COUNTRY COUNT: 95

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
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WO 2002004004	A1	20020117	(200231)*	EN	37
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RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
NL OA PT SD SE SL SZ TR TZ UG ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ

LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD
 SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
 AU 2001075888 A 20020121 (200234)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002004004	A1	WO 2001-US21746	20010711
AU 2001075888	A	AU 2001-75888	20010711

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001075888	A Based on	WO 200204004

PRIORITY APPLN. INFO: US 2000-217617P 20000711

AN 2002-268856 [31] WPIDS

AB WO 200204004 A UPAB: 20020516

NOVELTY - A **surfactant**-free oil-in-water wax dispersion (A) comprises a hydrophobic phase having wax mixed with an aqueous phase.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

(1) preparation of (A) involving mixing the wax with at least one hydrophobic phase, and then mixing the hydrophobic phase with the aqueous phase under conditions of high shear/high pressure; and

(2) a composition (B) comprising (A) and a base composition comprising a hydrophilic rheological modifying agent and an aqueous phase.

USE - For topical, anal, **vaginal**, ophthalmic, nasal or otic application (claimed).

ADVANTAGE - The dispersion comprises wax or hydrophobic semi-solid that is water resistant and provides aesthetically pleasing tactile properties. The dispersion is high pressure, high shear and is stable for a commercially relevant period of time e.g. 180 - 720 days when stored at about room temperature in commercial packages.

Dwg.0/0

L117 ANSWER 5 OF 24 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:676575 HCAPLUS

DOCUMENT NUMBER: 135:231705

TITLE: Compositions and methods for trapping and inactivating pathogenic microbes and spermatozoa

INVENTOR(S): Garg, Sanjay; Zaneveld, Lourens Jan Dirk; Anderson, Robert Anthony, Jr.; Waller, Donald Paul

PATENT ASSIGNEE(S): Rush-Presbyterian-St. Luke's Medical Center, USA

SOURCE: PCT Int. Appl., 72 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001066084	A2	20010913	WO 2001-US7042	20010306
WO 2001066084	A3	20020228		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,

LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
 RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,
 VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2000-187574P P 20000307

AB Antimicrobial and contraceptive compns. and methods which prevent and/or reduce the risk of transmission of sexually transmitted diseases (STDs) through sexual activity as well as prevent and/or reduce the risk of pregnancy are provided. The compns. contain (1) a matrix-forming agent, such as alginic acid, chitosan, gellan gum, and poloxamer, (2) a bioadhesive agent selected from the group consisting of xanthan gum, hydroxypropyl cellulose, hydroxypropyl Me cellulose, sodium CM-cellulose, chitosan, polycarbophil, and carbopol, (3) a buffering agent, such as lactic acid, citric acid, potassium acid tartrate, benzoic acid, alginic acid, sorbic acid, fumaric acid, ascorbic acid, stearic acid, oleic acid, (4) optionally a humectant selected from glycerol, polyethylene glycols, propylene glycols, sorbitol, and triacetin, (5) optionally a preservative, and (6) water. The compn. is suitable for application within the vagina. The compn. (a) forms a semisolid matrix on contact with ejaculate (thereby trapping ejaculated microbes and spermatozoa), (b) causes hardening of cervical mucus (thereby decreasing the probability of sperm entry), (c) forms a bioadhesive layer over vaginal surfaces (thereby preventing or reducing the risk of contact of STD-causing microbes with the vaginal surfaces), (d) maintains an acidic vaginal pH of < 5 in the presence of semen ejaculated from the male, and (e) does not significantly impair the natural microbiol. balance within the vagina. The antimicrobial and contraceptive compns. may also contain addnl. antimicrobial and/or contraceptive agents (e.g., nonoxynol-9, octoxynol-9, benzalkonium chloride, phosphorylated hesperidins, sulfonated hesperidins, polystyrene sulfonates, substituted benzenesulfonic acid formaldehyde copolymers, H₂SO₄-modified mandelic acids, povidone iodine, itraconazole, ketoconazole, metronidazole, clotrimazole, fluconazole, teraonazole, miconazole, tinidazole, iconazole, chloramphenicol, nystatin, cyclopiroxolamine, and the like). For example, gels were prep'd. contg. alginic acid 4.25%, xanthan gum 3.0%, glycerol 8.0%, lactic acid 2.0%, citric acid 1.0%, potassium bitartrate 0.4%, benzoic acid 0.2%, nonoxynol-9 0-10%, and water up to 100%. The pH of the formulations was adjusted to a pH .apprx.3.5-3.6 with NaOH. Gels showed good trapping property and good stability for prolonged periods of time even with nonoxynol-9 levels of up to 5%. Gels themselves, without a contraceptive agent, were effective spermicides, and gels with and without nonoxynol-9 were highly effective in preventing chlamydia infection in mice, more effective than com. products (Gynol II, KY Plus, Advantages-S, and Conceptrol). The trapping gels were also formulated into vaginal tablets.

L117 ANSWER 6 OF 24 WPIDS (C) 2002 THOMSON DERWENT

ACCESSION NUMBER: 2001-616056 [71] WPIDS

DOC. NO. CPI: C2001-184321

TITLE: New pharmaceutical composition useful in inhalation therapy comprises an electrospun fiber of a polymeric carrier integrated with an active agent.

DERWENT CLASS: A96 B05 B07 C07 F01

INVENTOR(S): BALDONI, J M; IGNATIOUS, F

PATENT ASSIGNEE(S): (SMIK) SMITHKLINE BEECHAM CORP

COUNTRY COUNT: 80

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
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 WO 2001054667 A1 20010802 (200171)* EN 37
 RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
 NL OA PT SD SE SL SZ TR TZ UG ZW
 W: AE AL AU BA BB BG BR BZ CA CN CZ DZ EE GE GH GM HR HU ID IL IN IS
 JP KP KR LC LK LR LT LV MA MG MK MN MX MZ NO NZ PL RO SG SI SK SL
 TR TT TZ UA US UZ VN YU ZA
 AU 2001031134 A 20010807 (200174)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001054667	A1	WO 2001-US2399	20010125
AU 2001031134	A	AU 2001-31134	20010125

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001031134	A Based on	WO 200154667

PRIORITY APPLN. INFO: US 2000-178682P 20000128

AN 2001-616056 [71] WPIDS

AB WO 200154667 A UPAB: 20011203

NOVELTY - A pharmaceutical composition comprises an electrospun fiber of a polymeric carrier integrated with an active agent.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for preparing the pharmaceutical composition involving

(1) making a solution of the active agent and the polymeric carrier with a solvent and

(2) electrospinning the solution of step a) into a fiber.

USE - For inhalation therapy and for dispersion in an aqueous solution (claimed).

ADVANTAGE - The composition enhances the bioavailability of a drug, preferably a poorly water soluble drug. The rapid dissolving dosage form of the composition disintegrates in a rapid manner, over a short time period, in the mouth or other suitable body cavity. In the oral context, small particulate matter is produced which gets ingested without the need of water.

Dwg.0/3

L117 ANSWER 7 OF 24 MEDLINE
 ACCESSION NUMBER: 2000230899 MEDLINE
 DOCUMENT NUMBER: 20230899 PubMed ID: 10770130
 TITLE: Microbicides: ideas flourish, money to follow?
 AUTHOR: Stephenson J
 SOURCE: JAMA, (2000 Apr 12) 283 (14) 1811-2. ←
 Journal code: 7501160. ISSN: 0098-7484.
 PUB. COUNTRY: United States
 DOCUMENT TYPE: News Announcement
 LANGUAGE: English
 FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals; AIDS
 ENTRY MONTH: 200004
 ENTRY DATE: Entered STN: 20000505
 Last Updated on STN: 20000505
 Entered Medline: 20000427

L117 ANSWER 8 OF 24 WPIDS (C) 2002 THOMSON DERWENT
 ACCESSION NUMBER: 2000-205553 [18] WPIDS

DOC. NO. NON-CPI: N2000-152972
 DOC. NO. CPI: C2000-063354
 TITLE: Medicinal products, e.g. catheters or prostheses, contain two agents of different lipophilicity to provide retarded release of drugs, e.g. antimicrobial agents.
 DERWENT CLASS: A96 B05 B07 D22 P34
 INVENTOR(S): PULVERER, G; SCHIERHOLZ, J M; SCHIERHOLZ, J
 PATENT ASSIGNEE(S): (SCHI-I) SCHIERHOLZ J M; (SCHI-I) SCHIERHOLZ J
 COUNTRY COUNT: 27
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2000007574	A1	20000217	(200018)*	GE	47
RW: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE					
W: JP US					
EP 985413	A1	20000315	(200018)	GE	
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT					
RO SE SI					
EP 1100479	A1	20010523	(200130)	GE	
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE					

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000007574	A1	WO 1999-EP5685	19990805
EP 985413	A1	EP 1998-114781	19980806
EP 1100479	A1	EP 1999-940159	19990805
		WO 1999-EP5685	19990805

FILING DETAILS:

PATENT NO	KIND	PATENT NO
EP 1100479	A1 Based on	WO 200007574

PRIORITY APPLN. INFO: US 1998-95562P 19980806; DE 1998-19835546
 19980806; EP 1998-114781 19980806

AN 2000-205553 [18] WPIDS

AB WO 200007574 A UPAB: 20000412

NOVELTY - Medicinal products contain two components (A) and (B) having different lipophilicities and water solubilities, at least one of which is a drug.

DETAILED DESCRIPTION - A non-degradable medicinal product contains two components (A) and (B), at least one of which is a drug. (A) is more lipophilic than (B), (A) has a solubility in water of 1-300 μ g/ml and (B) has a higher solubility than (A). (A) and (B) are each present in an effective amount, but at not more than 10 wt. % based on the carrier material. Excluded are combinations of chlorhexidine/silver sulfadiazine, triclosan-chlorhexidine, polyethylene glycol-polyurethane or combinations of clortrimazole, triclosan and optionally porous polyethylene.

INDEPENDENT CLAIMS are also included for the following:

(i) the preparation of the products, by swelling, solvent casting, active agent lacquering, extrusion and/or injection molding of polymers (such as PUR, SIR or PET) and/or by active agent coating (optionally using a carrier, e.g. polylactide, polyorthoester, polyethylene glycol, other bioresorbable polymers or non-resorbable polymers) on metal endoprostheses; and

(iii) a method for controlling the release of (B) from a medicinal

product, by combining (B) with (A).

USE - The medicinal products are specifically contact lenses, catheters, vascular prostheses, endoprostheses, surgical antimicrobial agent carriers (e.g. collagen non-wovens), stents, 'blades', bone cement, metallic endoprostheses, CAPD catheters, wound coverings, sprayed polyurethane non-wovens or drainage lines (all claimed). They can provide retarded release of a wide range of drugs (e.g. antibiotics or other antimicrobial agents to control infections, sexual hormones for fertility control or cancer treatment, disinfectants, antineoplastic agents, analgesics, antiinflammatories, local anesthetics and/or antithrombotic agents). The drugs may be intracellularly enriched in bacteria, thrombocytes and/or other types of cells. One of (A) and (B) may also be a biologically inactive material (e.g. a surfactant) which improves biocompatibility.

ADVANTAGE - The rate of release of (B) is controlled by the presence of (A), to provide retarded release of (B) into the surrounding environment. Constant rate release of (B) over a prolonged period may be achieved.

Dwg.0/5

L117 ANSWER 9 OF 24 WPIDS (C) 2002 THOMSON DERWENT
 ACCESSION NUMBER: 2000-256137 [22] WPIDS
 DOC. NO. CPI: C2000-078103
 TITLE: Solid formulation for improving bioavailability of poorly water-soluble drugs comprises the drug in an oil and/or fatty acid dispersed in a water-soluble polyol matrix.
 DERWENT CLASS: A96 B05 B07
 INVENTOR(S): LEE, B J
 PATENT ASSIGNEE(S): (WONJ-N) WON JIN BIOPHARMA CO LTD
 COUNTRY COUNT: 24
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2000000179	A1	20000106	(200022)*	EN	67
RW: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE					
W: AU CA CN JP US					
AU 9946556	A	20000117	(200026)		
KR 2000006503	A	20000125	(200063)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000000179	A1	WO 1999-KR341	19990628
AU 9946556	A	AU 1999-46556	19990628
KR 2000006503	A	KR 1999-24437	19990626

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 9946556	A Based on	WO 200000179

PRIORITY APPLN. INFO: KR 1999-24437 19990626; KR 1998-24563 19980627

AN 2000-256137 [22] WPIDS

AB WO 200000179 A UPAB: 20000508

NOVELTY - A solid dispersed formulation for poorly water-soluble drugs is made by dispersing the drug in an oil and/or fatty acid and mixing the

dispersion with a water-soluble polyol matrix and drying the mixture.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for medicines prepared using the novel solid.

USE - The composition is useful for enhancing the bioavailability of poorly water-soluble drugs.

ADVANTAGE - The novel composition provides improved solubility in the gastrointestinal tract giving a great increase in bioavailability.

Formulation does not require the use of organic solvents.

Dwg.0/5

L117 ANSWER 10 OF 24 WPIDS (C) 2002 THOMSON DERWENT
 ACCESSION NUMBER: 2000-681105 [67] WPIDS
 DOC. NO. CPI: C2000-207282
 TITLE: Compositions to deliver compounds into cells e.g. to treat rheumatoid arthritis, comprise organic halide, targeting ligand and nuclear localization sequence in combination with compound and carrier.
 DERWENT CLASS: A96 B07 D16
 INVENTOR(S): MCCREERY, T; SADEWASSER, D A; UNGER, E C
 PATENT ASSIGNEE(S): (IMAR-N) IMARX PHARM CORP
 COUNTRY COUNT: 25
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
EP 1046394	A2	20001025 (200067)*	EN	78	
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI					

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 1046394	A2	EP 2000-303249	20000418

PRIORITY APPLN. INFO: US 1999-294623 19990419

AN 2000-681105 [67] WPIDS

AB EP 1046394 A UPAB: 20001223

NOVELTY - Compositions for delivering compounds into cells comprise: an organic halide; a targeting ligand; and a nuclear localization sequence in combination with the compound to be delivered.

ACTIVITY - Immunoregulatory; anti-inflammatory; anti-arthritis.

USE - The compositions are used to deliver compounds into cells (claimed), particularly for the treatment of autoimmune disorders and inflammatory conditions such as rheumatoid arthritis. They may also be used to deliver pharmaceuticals, drugs, diagnostic agents, synthetic organic molecules, peptides, proteins, vitamins, steroids, genetic materials and other bioactive agents e.g. mitotic inhibitors (vinca alkaloids), radiopharmaceuticals (radioactive iodine, phosphorus and cobalt isotopes), hormones (progestins, estrogens, anti-estrogens), anthelmintics, antimalarials, antituberculosics, biologicals (immune sera, antitoxins, antivenoms), rabies prophylactic products, bacterial vaccines, viral vaccines, aminoglycosides, respiratory products (xanthine derivatives, theophylline, aminophylline), thyroid therapeutics (iodine salts, antithyroid agents), cardiovascular products (chelating agents, mercurial diuretics, cardiac glycosides), glucagons, blood products (parenteral iron, hemin, hematoporphyrins and derivatives), targeting ligands (peptides, antibodies, antibody fragments), biological response modifiers (muramyl dipeptide, muramyl tripeptide, microbial cell wall

components, lymphokines - bacterial endotoxin e.g. lipopolysaccharide and macrophage activation factor), subunits of bacteria (Mycobacteria, Comebacteria), synthetic dipeptides (N-acetyl-muramyl-L-alanyl-D-isoglutamine), antifungals (ketoconazole, nystatin, griseofulvin, flucytosine, miconazole, amphotericin B), toxins (ricin), immunosuppressants (cyclosporins), antibiotics (beta -lactam, sulfazecin), hormones (growth hormone, melanocyte-stimulating hormone, estradiol, beclomethasone dipropionate, betamethasone, betamethasone acetate, betamethasone sodium phosphate, betamethasone disodium phosphate, cortisone acetate, dexamethasone, dexamethasone acetate, dexamethasone sodium phosphate, flunisolide, hydrocortisone, hydrocortisone acetate, hydrocortisone cypionate, hydrocortisone sodium phosphate, hydrocortisone sodium succinate, methylprednisolone, methylprednisolone acetate, methylprednisolone sodium succinate, paramethasone acetate, prednisolone acetate, prednisolone sodium phosphate, prednisolone tebutate, prednisone, triamcinolone, triamcinolone acetonide, triamcinolone diacetate, triamcinolone hexacetonide, fluorocortisone acetate, oxytocin, vasopressin and their derivatives), vitamins (cyanocobalamin neonic acid), retinoids and their derivatives (retinal palmitate, alpha -tocopheryl), peptides and enzymes (manganese superoxide dismutase, alkaline phosphatases), anti-allergens (amelexanox), anticoagulants (phenprocoumon, heparin), tissue plasminogen activators, streptokinase and urokinase), circulatory drugs (propranolol), metabolic potentiators (glutathione), antibiotics (p-aminosalicylic acid, isoniazid, capreomycin sulfate, cycloserine, ethambutol hydrochloride, ethionamide, pyrazinamide, rifampicin, streptomycin sulfate dapsone, chloramphenicol, neomycin, ceflaxor, cefadroxil, cephalixin, cephradine erythromycin, clindamycin, lincomycin, amoxicillin, ampicillin, bacampicillin, carbenicillin, dicloxicillin, cyclacillin, picloxicillin, hetacillin, methicillin, nafcillin, oxacillin, penicillin (G and V), ticarcillin, rifampin, tetracycline), **antivirals** (acyclovir, ddI, foscarnet, zidovudine, ribavirin, vidarabine monohydrate), antianginals (diltiazem, nifedipine, verapamil, erythritol tetranitrate, isosorbide dinitrate, nitroglycerin (glyceryl trinitrate), pentaerythritol tetranitrate, anti-inflammatories (diflusal, ibuprofen, indomethacin, meclofenamate, mefenamic acid, naproxen, oxyphenbutazone, phenylbutazone, piroxicam, sulindac, tolmetin, aspirin, salicylates), antiprotozoans (chloroquine, hydroxychloroquine, metronidazole, quinine, meglumine antimonate), antirheumatics (penicillamine), narcotics (paregoric), opiates (codeine, heroin, methadone, morphine, opium), cardiac glycosides (deslanoside, digitoxin, digoxin, digitalin, digitalis), neuromuscular blockers (atracurium mesylate, gallamine triethiodide, hexafluorenum bromide, metocurium iodide, pancurium bromide, succinylcholine chloride (suxamethonium chloride), tubocurarine chloride, vecuronium bromide), sedatives (amobarbital, amobarbital sodium, aprobarbital, butobarbital sodium, chloral hydrate, ethchlorvynol, ethinamate, flurazepam hydrochloride, glutethimide, methotrimeprazine hydrochloride, methypylon, midazolam hydrochloride, paraldehyde, pentobarbital, pentobarbital sodium, secobarbital sodium, thiopental sodium), antineoplastics (methotrexate, fluorouracil, adriamycin, mitomycin, ansamitomyacin, bleomycin, cysteine arabinoside, arabinosyl adenine, mercaptopolylysine, vincristine, busulfan, chlorambucil, azidothymidine, melphalan (e.g. PAM, L-PAM or phenylalanine mustard), mercaptopurine, mitotane, procarbazine hydrochloride, dactinomycin (actinomycin D), daunorubicin hydrochloride, dosorubicin hydrochloride, Taxol (RTM: paclitaxel), plicamycin (mithramycin), aminoglutethimide, estramustine phosphate sodium, flutamide, leuprolide acetate, megestrol acetate, tamoxifen citrate, testolactone, trilostane, amsacrine (m-AMSA), asparaginase, etoposide (VP-16), interferon alpha -2a, interferon alpha -2b, teniposide (VM-26), vinblastine sulfate (VLB), vincristine sulfate, hydroxyurea, procarbazine

or dacarbazine).

ADVANTAGE - The compositions provide improved delivery of compositions including drugs and genetic materials into cells. They provide for specific targeting and delivery of compounds to particular cells and increased targeting to the nuclei of targeted cells. They also allow delivery to cell lines that would be otherwise resistant to intracellular delivery and gene expression using other conventional means.

DESCRIPTION OF DRAWING(S) - Schematic representation of a targeted composition.

targeted composition 1
lipid coating 2
lipids 2A
halocarbon gas or liquid 3
genetic material 4
targeting ligand 5
lipid head group 6
tether 7
tether 7A
nuclear localization sequence 8
condensing agent. 9
Dwg.2/2

L117 ANSWER 11 OF 24 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 2000137961 EMBASE
TITLE: Microbicides: Ideas flourish, money to follow?.
AUTHOR: Stephenson J.
SOURCE: Journal of the American Medical Association, (12 Apr 2000) 283/14 (1811-1812).
ISSN: 0098-7484 CODEN: JMAAP
COUNTRY: United States
DOCUMENT TYPE: Journal; Note
FILE SEGMENT: 004 Microbiology
LANGUAGE: English

*Index terms
for this article
looked good.
It might be
worth taking a
look at even
though it is a
"news" article.
[Also see
answer #7]*

L117 ANSWER 12 OF 24 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 2001054019 EMBASE
TITLE: Mucoadhesive drug delivery systems: A review of current status.
AUTHOR: Chowdary K.P.R.; Srinivas L.
CORPORATE SOURCE: K.P.R. Chowdary, Industrial Pharmacy Division, Dept. of Pharmaceutical Sciences, Andhra University, Visakhapatnam 530 003, India
SOURCE: Indian Drugs, (2000) 37/9 (400-406). ← ILL ✓
Refs: 94
ISSN: 0019-462X CODEN: INDRBA
COUNTRY: India
DOCUMENT TYPE: Journal; General Review
FILE SEGMENT: 037 Drug Literature Index
039 Pharmacy
030 Pharmacology
LANGUAGE: English
SUMMARY LANGUAGE: English

AB Mucoadhesion is a topic of current interest in the design of drug delivery systems. Mucoadhesive drug delivery systems prolong the residence time of the dosage form at the site of application or absorption and facilitate an intimate contact of the dosage form with the underlying absorption surface and thus contribute to improved and/or better therapeutic performance of drugs. In recent years many such mucoadhesive drug delivery systems have been developed for oral, buccal, nasal, rectal and vaginal routes for both systemic and local effects. The principles underlying the development of

mucoadhesive drug delivery systems and the research work carried out on these systems are reviewed here.

L117 ANSWER 13 OF 24 HCAPLUS COPYRIGHT 2002 ACS DUPLICATE 1
 ACCESSION NUMBER: 1999:690931 HCAPLUS
 DOCUMENT NUMBER: 131:295571
 TITLE: Formulations for the prevention or the treatment of diseases affecting mucosa or skin, or for pregnancy prevention, and an applicator for the delivery of topical formulations into mucosal cavities
 INVENTOR(S): Bergeron, Michel G.; Desormeaux, Andre; Omar, Rabeea F.; Juhasz, Julianna
 PATENT ASSIGNEE(S): Infectio Recherche Inc., Can.
 SOURCE: PCT Int. Appl., 65 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9953897	A2	19991028	WO 1999-CA359	19990421
WO 9953897	A3	20000413		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2329350	AA	19991028	CA 1999-2329350	19990421
AU 9935904	A1	19991108	AU 1999-35904	19990421
EP 1079802	A2	20010307	EP 1999-917703	19990421
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
BR 9909801	A	20020122	BR 1999-9801	19990421
JP 2002512180	T2	20020423	JP 2000-544304	19990421
NO 2000005310	A	20001221	NO 2000-5310	20001020
PRIORITY APPLN. INFO.: CA 1998-2235427 A 19980421				
CA 1998-2257001 A 19981223				
WO 1999-CA359 W 19990421				
AB Formulations for the prevention of infection and/or abnormal conditions of mucosa and/or skin caused by any pathogen and/or any disease, and more particularly for the prevention of sexually transmitted infections specially HIV and HSV. This invention also relates to formulations for the treatment of infection and/or abnormal conditions of skin and/or mucosa and more particularly for the treatment of herpetic lesions. The formulations could be used as a prophylactic agent to prevent accidental infection of health care workers. The formulations could be used for the healing and/or treatment of burn wounds and prevention of further infection. This invention also relates to the development of a unique vaginal/ano-rectal applicator for the uniform delivery of any topical formulations to treat and/or prevent any infection and/or abnormal conditions of mucosa cavity caused by any pathogen and/or disease. Pretreatment of HSV-1 and HSV-2 with sodium lauryl sulfate (I) for 1 h at 37.degree. decreased their infectivity on Vero cells. HSV-1 and HSV-2 infectivity was reduced to 21, and 50-70% when viral particles were				

pretreated with 25 .mu.M I. A complete loss of infectivity of all strains tested were obtained following pretreatment to viruses with 50 .mu.M I. The gel formulation comprise I 1-15 and Poloxamer 407 10-35%.

L117 ANSWER 14 OF 24 WPIDS (C) 2002 THOMSON DERWENT
 ACCESSION NUMBER: 1999-494206 [41] WPIDS
 DOC. NO. CPI: C1999-144822
 TITLE: Pharmaceutical compositions for oral, transmucosal, parenteral and topical delivery of active agents and to improve biopharmaceutical properties of actives.
 DERWENT CLASS: A96 B04 B05 B07
 INVENTOR(S): CARLI, F; COCEANI, N; COLOMBO, I; DEL CURTO, M D; ESPOSITO, P
 PATENT ASSIGNEE(S): (VECT-N) VECTORPHARMA SPA; (EURA-N) EURAND INT SPA; (VECT-N) VECTORPHARMA INT SPA
 COUNTRY COUNT: 85
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9939700	A1	19990812	(199941) *	EN	73
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL					
OA PT SD SE SZ UG ZW					
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD					
GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV					
MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT					
UA UG US UZ VN YU ZW					
AU 9927238	A	19990823	(200005)		
EP 1051160	A1	20001115	(200059)	EN	
R: AT BE CH DE DK ES FI FR GB GR IE IT LI NL PT SE					
BR 9907683	A	20001114	(200064)		
KR 2001040726	A	20010515	(200167)		
IT 1298575	B	20000112	(200175)		
JP 2002502813	W	20020129	(200211)		70
AU 747129	B	20020509	(200238)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9939700	A1	WO 1999-EP782	19990205
AU 9927238	A	AU 1999-27238	19990205
EP 1051160	A1	EP 1999-907510	19990205
		WO 1999-EP782	19990205
BR 9907683	A	BR 1999-7683	19990205
		WO 1999-EP782	19990205
KR 2001040726	A	KR 2000-708610	20000805
IT 1298575	B	IT 1998-MI234	19980206
JP 2002502813	W	WO 1999-EP782	19990205
		JP 2000-530200	19990205
AU 747129	B	AU 1999-27238	19990205

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 9927238	A Based on	WO 9939700
EP 1051160	A1 Based on	WO 9939700
BR 9907683	A Based on	WO 9939700
JP 2002502813	W Based on	WO 9939700

AU 747129 B Previous Publ. AU 9927238
 Based on WO 9939700

PRIORITY APPLN. INFO: IT 1998-MI234 19980206

AN 1999-494206 [41] WPIDS

AB WO 9939700 A UPAB: 19991011

NOVELTY - Pharmaceutical compositions in form of solid nanoparticles comprise composite material comprising:

- (a) at least one lipoid substance;
- (b) at least one amphiphilic substance; and
- (c) hydrosoluble, liposoluble or poorly soluble pharmaceutical active.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for the preparation of the compositions.

USE - For oral and transmucosal delivery of active agents including polypeptides and proteins not usually absorbable by this route, for oral and/or parenteral delivery of lipophilic highly insoluble and poorly absorbable molecules including cyclosporin, leuprolide, taxol and its derivatives, etoposide, **acyclovir** or ganciclovir. Used to improve biopharmaceutical properties of active principles including for controlled or prolonged release and to increase plasmatic half-lives. Used to topically deliver molecules active at the mucosal or dermal level e.g. **antivirals**, anti-micotics and anti-psoriatics. Used to encapsulate active ingredients with unpleasant flavor, administrable in immediate-release formulations. Used to deliver non-steroidal anti-inflammatory drugs (NSAIDs), steroidal anti-inflammatory drugs (SAIDs), estrogenic or progestational hormones, cardiovascular, **antivirals**, anti-micotics, antineoplastics, hypolipidemics, peptides, proteins, ergot alkaloids and derivatives (dihydroergotamine, didehydroergotoxine, bromocriptine), analgesics and NSAIDs and their salts (diclofenac sodium, diclofenac hydroxyethyl pyrrolidone, diclofenac diethylamine, ibuprofen, flurbiprofen, ketoprofen, indomethacin, mefenamic acid, naproxen, nimesulide, piroxicam), antiarrhythmics (amiodarone, diisopyramide, propranolol, verapamil), antibacterials (amoxicillin, flucloxacillin, gentamicin, rifampicin, erythromycin, cephalosporins), antifungals, and antipsoriatics (amphotericin, butoconazole nitrate, ketoconazole, econazole, etretinate, fluconazole, flucytosine, griseofulvin, itraconazole, miconazole, nystatin, sulconazole, tioconazole), **antivirals** (**acyclovir**, ganciclovir, AZT, protease inhibitors), antihypertensives (amlodipine, clonidine, diltiazem, felodipine, guanabenz acetate, isradipine, minoxidil, nicardipine hydrochloride, nimodipine, nifedipine, prazosin hydrochloride, papaverine), antidepressants (carbamazepine), antihistaminics (diphenhydramine, chlorpheniramine, pyrilamine, chlorcyclizine, promethazine, acrivastine, cinnarizine, loratadine, terfenadine), antineoplastics and immunosuppressants (cyclosporin, dacarbazine, etretinate, etoposide, lomustine, melphalan, mitomycin, mitoxantrone, paclitaxel, procarbazine, tamoxifen, taxol and derivatives, taxotere), anxiolytics, sedatives and hypnotics (alprazolam, bromazepam, diazepam, lorazepam, oxazepam, temazepam, sulpiride, triazolam), beta blockers (alprenolol, atenolol, oxprenolol, pindolol, propranolol), beta agonists (salbutamol, salmeterol), cardiac and cardiovascular inotropics (amrinone, digitoxin, digoxin, lanatoside C, medigoxin, ubidecarenone), corticosteroids (beclomethasone, betamethasone, budesonide, cortisone acetate, desoximethasone, dexamethasone, fludrocortisone acetate, flunisolide, hydrocortisone, methylprednisolone, methylprednisone, triamcinolone), gastrointestinal and anti H2 histaminics (cimetidine, cisapride, domperidone, famotidine, loperamide, mesalazine, omeprazole, ondansetron hydrochloride, ranitidine), hypolipidemics (claimed) (bezafibrate, clofibrate, gemfibrozil, probucol, lovastatin),

anti-anginals (amyl nitrate, glyceryl trinitrate, isosorbide dinitrate and mononitrate and pentaerythritol tetranitrate), central acting drugs (nicotine), vitaminic and nutritional agents (vitamins A, B2, D and derivatives, E and derivatives, and K), opioid analgesics (codeine, dextropropoxyphene, dihydrocodeine, morphine, pentazocine, methadone), **sexual** hormones (danazol, ethinyl estradiol, medroxyprogesterone acetate, methyltestosterone, testosterone, norethisterone, norgestrel, estradiol, estriol, progesterone, stilbestrol, diethylstilbestrol), peptidic, proteic and polysaccharidic molecules (leuprolide and LH-RH analogs, calcitonin, glutathione, somatostatin, GH, desmopressin DDAVP, interferon, molgramostin, EGF, NGF, insulin, glucagon, toxins or toxoides (tetanus toxin), antigenic factors of proteic or polysaccharidic kind, heparin, low-molecular weight heparin or heparinoids) and molecules with specific topical activity e.g. sun protectors (UV absorbers), skin nutrients, ceramides, and glycolic **acid**.

ADVANTAGE - Surface and mass properties of composite materials allow improved incorporation of active ingredients and increased bioavailability of poorly absorbable active ingredients. Have properties not achieved by usual mixing of lipidic and amphiphilic substances. Assist oral administration absorption and half-life time in circulatory system, allow incorporation of thermolabile drugs, are suitable for vehiculation of both liposoluble and hydrosoluble drugs, and are able to homogeneously incorporate hydrophilic drugs (e.g. peptides) inside an essentially lipophilic matrix. It is possible to have vector systems (comprising nanoparticles) originated exclusively by physical changes of component substances, thus not requiring long toxicological experimental tests.

Calcitonin marked by a fluorophor (7-nitrobenz-2-oxa-1,3-diazol) was incorporated into test nanoparticles (2: 99.0% stearic **acid** and 1.0% DMPG; 5: 91.5% stearic **acid** and 9.5% DMPG) and comparative nanoparticles (B: stearic **acid** 100%; C: stearic **acid** 90% and DMPG 10%) washed by ultrafiltration. The percentage of peptide superficially adsorbed with respect to the incorporated total was determined by measuring the fluorescence before and after treatment of the suspensions with proteolytic enzyme trypsin, which was able to dissolve and degrade only the peptide fraction adsorbed to the surface of the particles. Percentages were calculated by measuring the emission values in fluorescence with respect to a standard curve and with respect to 100% of fluorescence emitted before ultrafiltration. The incorporation efficiency (%) and adsorbed peptide (%) were as follows: (2) 10.2 and 0.11; (5) 9.19 and 0.49; (B) 1.82 and 0.93 and (C) 1.75 and 0.95. The results showed that the test composite nanoparticles increased the incorporation efficiency of the peptide, decreasing its superficially located fraction and maintaining the majority inside the composite matrix.

Dwg.0/11

L117 ANSWER 15 OF 24 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1995:719477 HCAPLUS

DOCUMENT NUMBER: 123:93396

TITLE: Condom coated with acidic polysaccharides for prevention of AIDS

INVENTOR(S): Enomoto, Yutaka; Fujii, Masahiko; Furusho, Takao; Yamamoto, Naoki

PATENT ASSIGNEE(S): Fuji Latex Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 8 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 661028	A1	19950705	EP 1994-120270	19941221
R: DE, ES, FR, GB, IT				
JP 07194640	A2	19950801	JP 1993-352000	19931228
PRIORITY APPLN. INFO.:			JP 1993-352000	19931228
AB A condom prophylactic against AIDS infection is coated with acidic polysaccharides having an antiviral action. The acidic polysaccharides are e.g. protein-bound saccharides and glycolipids extd. from seaweeds, Procaryomycota, and Eucaryomycota, carrageenan, etc. which bear acidic groups such as sulfate groups. A condom is coated with a soln. of said acidic polysaccharides by dipping.				
L117 ANSWER 16 OF 24 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.				
ACCESSION NUMBER:		95097338 EMBASE		
DOCUMENT NUMBER:		1995097338		
TITLE:		Stabilization of human epidermal growth factor (hEGF) in aqueous formulation.		
AUTHOR:		Son K.; Kwon C.		
CORPORATE SOURCE:		The State University of New Jersey, Department of Pharmaceutics, School of Pharmacy, P.O. Box 789, Piscataway, NJ 08855-0789, United States		
SOURCE:		Pharmaceutical Research, (1995) 12/3 (451-454). ISSN: 0724-8741 CODEN: PHREEB		
COUNTRY:		United States		
DOCUMENT TYPE:		Journal; Article		
FILE SEGMENT:		037 Drug Literature Index		
LANGUAGE:		English		
L117 ANSWER 17 OF 24 HCAPLUS COPYRIGHT 2002 ACS				
ACCESSION NUMBER:		1994:549053 HCAPLUS		
DOCUMENT NUMBER:		121:149053		
TITLE:		Use of sulfated polysaccharides for preventing sexually transmitted diseases		
INVENTOR(S):		Phillips, David M.; Bardin, Clyde Wayne; Pearce-Pratt, Rachel; Tan, Xin; Zacharopoulos, Vanaja		
PATENT ASSIGNEE(S):		Population Council, USA		
SOURCE:		PCT Int. Appl., 27 pp. CODEN: PIXXD2		
DOCUMENT TYPE:		Patent		
LANGUAGE:		English		
FAMILY ACC. NUM. COUNT:		1		
PATENT INFORMATION:				

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9415624	A1	19940721	WO 1994-US210	19940106
W: JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 678030	A1	19951025	EP 1994-909436	19940106
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 08506570	T2	19960716	JP 1994-516216	19940106
PRIORITY APPLN. INFO.:			US 1993-1795	19930108
			US 1993-173790	19931227
			WO 1994-US210	19940106
AB Cell-to-cell transmission of HIV, and thus the sexual transmission of AIDS, is inhibited by the direct application of sulfated polysaccharides to the epithelium of the vaginal mucosa, cervix, or penis. Sulfated polysaccharides include carrageenan and dextran sulfate, which may be formulated into a cream, suppository, gel or foam compns. Carrageenan I				

at 2.5-5 mg/mL inhibited the adhesion of HIV-infected lymphocytes to epithelial cells.

L117 ANSWER 18 OF 24 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 94335260 EMBASE
DOCUMENT NUMBER: 1994335260
TITLE: Stability of rhbFGF as determined by UV spectroscopic measurements of turbidity.
AUTHOR: Eberlein G.A.; Stratton P.R.; Wang Y.J.
CORPORATE SOURCE: 1430 O'Brien Drive, Menlo Park, CA 94025, United States
SOURCE: PDA Journal of Pharmaceutical Science and Technology, (1994) 48/5 (224-230).
ISSN: 1076-397X CODEN: JPHTEU
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 029 Clinical Biochemistry
030 Pharmacology
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English

AB Loss of potency of a protein formulation due to precipitation of the protein is a major concern to the pharmaceutical scientist. A simple screening method was developed to study the effect of excipients on protein precipitation. It will not provide accurate stability data but it allows the rejection of excipients that may interfere with the stability of a protein formulation. The method is based on measuring the increase in turbidity at 277 nm by UV-spectroscopy and was sensitive and reproducible enough to obtain data within 15 hr at 30.degree.C or 40.degree.C, which will allow prediction of precipitation behavior that would need with conventional methods 2-3 years. Human recombinant basic fibroblast growth factor (rhbFGF or bFGF) was formulated at various pH-values as well as in the presence of various concentrations of preservatives, surfactants, gelling agent, EDTA, NaCl, sodium sulfate, sucrose, and glycosaminoglycans (GAG). Most excipients increased bFGF aggregation rate when their concentrations were increased. Exceptions were heparin and some of its derivatives, and sodium sulfate: high concentrations of sucrose and sodium chloride suppressed aggregation.

L117 ANSWER 19 OF 24 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 95116653 EMBASE
DOCUMENT NUMBER: 1995116653
TITLE: Bioadhesion technologies for the delivery of peptide and protein drugs to the gastrointestinal tract.
AUTHOR: Lehr C.-M.
CORPORATE SOURCE: Department of Biopharmaceutics, Universitat des Saarlandes, D-66041 Saarbrücken, Germany
SOURCE: Critical Reviews in Therapeutic Drug Carrier Systems, (1994) 11/2-3 (119-160).
ISSN: 0743-4863 CODEN: CRTSEO
COUNTRY: United States
DOCUMENT TYPE: Journal; General Review
FILE SEGMENT: 027 Biophysics, Bioengineering and Medical Instrumentation
030 Pharmacology
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English

AB For the efficient delivery of peptides, proteins, and other biopharmaceuticals by nonparenteral routes, in particular via the gastrointestinal, or GI, tract, novel concepts are needed to overcome

significant enzymatic and diffusional barriers. In this context, bioadhesion technologies offer some new perspectives. The original idea of oral bioadhesive drug delivery systems was to prolong and/or to intensify the contact between controlled-release dosage forms and the stomach or gut mucosa. However, the results obtained during the past decade using existing pharmaceutical polymers for such purposes were rather disappointing. The encountered difficulties were mainly related to the physiological peculiarities of GI mucus. Nevertheless, research in this area has also shed new light on the potential of mucoadhesive polymers. First, one important class of mucoadhesive polymers, poly(acrylic acid), could be identified as a potent inhibitor of proteolytic enzymes. Second, there is increasing evidence that the interaction between various types of bio(muco)adhesive polymers and epithelial cells has direct influence on the permeability of mucosal epithelia. Rather than being just adhesives, mucoadhesive polymers may therefore be considered as a novel class of multifunctional macromolecules with a number of desirable properties for their use as biologically active drug delivery adjuvants. To overcome the problems related to GI mucus and to allow longer lasting fixation within the GI lumen, bioadhesion probably may be better achieved using specific bioadhesive molecules. Ideally, these bind to surface structures of the epithelial cells themselves rather than to mucus by receptor-ligand like interactions. Such compounds possibly can be found in the future among plant lectins, novel synthetic polymers, and bacterial or viral adhesion/invasion factors. Apart from the plain fixation of drug carriers within the GI lumen, direct bioadhesive contact to the apical cell membrane possibly can be used to induce active transport processes by membrane-derived vesicles (endo- and transcytosis). The nonspecific interaction between epithelia and some mucoadhesive polymers induces a temporary loosening of the tight intercellular junctions, which is suitable for the rapid absorption of smaller peptide drugs along the paracellular pathway. In contrast, specific endo- and transcytosis may ultimately allow the selectively enhanced transport of very large bioactive molecules (polypeptides, polysaccharides, or polynucleotides) or drug carriers across tight clusters of polarized epi- or endothelial cells, whereas the formidable barrier function of such tissues against all other solutes remains intact.

L117 ANSWER 20 OF 24 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
 ACCESSION NUMBER: 94221114 EMBASE
 DOCUMENT NUMBER: 1994221114
 TITLE: Identification of a mucin layer in the urinary bladder.
 AUTHOR: Grist M.; Chakraborty J.
 CORPORATE SOURCE: Department of Physiology/Biophysics, Medical College of
 Ohio, Toledo, OH 43699-0008, United States
 SOURCE: Urology, (1994) 44/1 (26-32).
 ISSN: 0090-4295 CODEN: URGYAZ
 COUNTRY: United States
 DOCUMENT TYPE: Journal; Article
 FILE SEGMENT: 005 General Pathology and Pathological Anatomy
 028 Urology and Nephrology
 LANGUAGE: English
 SUMMARY LANGUAGE: English

AB Objectives. The specific goal of this study was to establish a simple histochemical technique by which the glycosaminoglycan (GAG) lining in the rabbit bladder can be routinely identified. Methods. Rabbit bladder tissues were fixed in zinc formal, 10% neutral buffered formalin (NBF), 20% NBF, 40% NBF, 2% calcium acetate in 10% NBF, 2% sodium acetate in 10% NBF, 1% cetylpyridinium chloride in 10% NBF, 80% alcohol, histochoice, and 2.5% glutaraldehyde in 0.1 M cacodylate buffer. The following histochemical staining was used: mucicarmine/metanil yellow, colloidal

iron, deamination followed by colloidal iron, periodic acid-Schiff, saponification followed by colloidal iron, Alcian blue (AB) at variable pH values, combined aldehyde- fuchsin/AB, performic acid/AB, AB/Alcian yellow, high temperature (60.degree.C) methylation/saponification/AB, and AB/nuclear fast red at pH 5.8 with critical electrolyte concentrations with or without deamination. Results. AB with sodium acetate buffer at pH 5.8 containing 0.6 M or 0.8 M magnesium chloride (MgCl₂) showed a well-defined thin GAG lining on the surface of the urothelium, whereas histochemical staining used by previous investigators showed only patchy distribution. There was no observable difference due to the gender, fixative, or region of the bladder from which the tissue was obtained. Conclusions. A very thin lining of GAG exists in the rabbit bladder which can be localized by AB in sodium acetate buffer at pH 5.8 containing 0.6 M or 0.8 M MgCl₂ but not by conventional histochemical techniques. This method now can be applied to answer many questions regarding urothelial function.

L117 ANSWER 21 OF 24 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 93302866 EMBASE
DOCUMENT NUMBER: 1993302866
TITLE: Treatment of diseases of the eye with mucoadhesive delivery systems.
AUTHOR: Greaves J.L.; Wilson C.G.
CORPORATE SOURCE: Division of Addictive Behaviour, St. George's Hospital Medical School, Cranmer Terrace, Tooting, London SW17 0RE, United Kingdom
SOURCE: Advanced Drug Delivery Reviews, (1993) 11/3 (349-383).
ISSN: 0169-409X CODEN: ADDREP
COUNTRY: Netherlands
DOCUMENT TYPE: Journal; General Review
FILE SEGMENT: 001 Anatomy, Anthropology, Embryology and Histology
002 Physiology
023 Nuclear Medicine
027 Biophysics, Bioengineering and Medical Instrumentation
037 Drug Literature Index
012 Ophthalmology
030 Pharmacology
LANGUAGE: English
SUMMARY LANGUAGE: English

L117 ANSWER 22 OF 24 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 93302862 EMBASE
DOCUMENT NUMBER: 1993302862
TITLE: Drug delivery using buccal-adhesive systems.
AUTHOR: Smart J.D.
CORPORATE SOURCE: Drug delivery Research Unit, School Pharmacy/Biomedical Sciences, University of Portsmouth, Park Bldg., King Henry I Street, Portsmouth PO1 2DZ, United Kingdom
SOURCE: Advanced Drug Delivery Reviews, (1993) 11/3 (253-270).
ISSN: 0169-409X CODEN: ADDREP
COUNTRY: Netherlands
DOCUMENT TYPE: Journal; General Review
FILE SEGMENT: 002 Physiology
027 Biophysics, Bioengineering and Medical Instrumentation
048 Gastroenterology
030 Pharmacology
037 Drug Literature Index
LANGUAGE: English

SUMMARY LANGUAGE: English

AB The buccal mucosa has been investigated for local drug therapy and the systemic delivery of therapeutic peptides and other drugs that are subjected to first-pass metabolism or are unstable within the rest of the gastrointestinal tract. The mucosa of the oral cavity presents a formidable barrier to drug penetration, and one method of optimising drug delivery is by the use of adhesive dosage forms. Mucosal-adhesive materials are hydrophilic macromolecules containing numerous hydrogen-bond-forming groups. They have been called 'wet' adhesives in that they require moisture to become adhesive and this may be supplied by the saliva; the latter may also act as the dissolution medium. Various buccal-adhesive formulations have been investigated with a view to delivering drugs locally or systemically. If the buccal route is to be used for the systemic delivery of large macromolecules, then a penetration enhancer incorporated into an adhesive dosage form may be a possible approach.

L117 ANSWER 23 OF 24 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1992:143835 HCAPLUS

DOCUMENT NUMBER: 116:143835

TITLE: Prevention of viral diseases with polysaccharide sulfates

INVENTOR(S): Diringer, Heino; Ehlers, Bernhardt; Schrinner, Elmar; Winkler, Irvin

PATENT ASSIGNEE(S): Hoechst A.-G., Germany

SOURCE: Eur. Pat. Appl., 7 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 464759	A2	19920108	EP 1991-110901	19910701
EP 464759	A3	19920603		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
DE 4021066	A1	19920109	DE 1990-4021066	19900703
CA 2046037	AA	19920104	CA 1991-2046037	19910702
AU 9179470	A1	19920109	AU 1991-79470	19910702
JP 04230325	A2	19920819	JP 1991-161381	19910702

PRIORITY APPLN. INFO.: DE 1990-4021066 19900703

AB Polysaccharide sulfates prevent the development of viral diseases, such as AIDS, Jacob-Creutzfeldt syndrome and scrapie. I.p. administration of 10 mg pentosan polysulfate prior to inoculation with scrapie virus, prolonged the survival of mice.

L117 ANSWER 24 OF 24 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.

ACCESSION NUMBER: 89117724 EMBASE

DOCUMENT NUMBER: 1989117724

TITLE: Evaluation of muco-adhesive properties and in vivo activity of ophthalmic vehicles based on hyaluronic acid.

AUTHOR: Saettone M.F.; Chetoni P.; Torracca M.T.; Burgalassi S.; Giannaccini B.

CORPORATE SOURCE: Laboratorio di Technologie Farmaceutiche-Biofarmacia, Universita di Pisa, 56100 Pisa, Italy

SOURCE: International Journal of Pharmaceutics, (1989) 51/3 (203-212).

ISSN: 0378-5173 CODEN: IJPHDE

COUNTRY: Netherlands

DOCUMENT TYPE: Journal
FILE SEGMENT: 012 Ophthalmology
030 Pharmacology
037 Drug Literature Index

LANGUAGE: English

SUMMARY LANGUAGE: English

AB A series of prospective ophthalmic vehicles based on hyaluronic acid (HA) and on polyacrylic acid (PAA) (solutions, gels, matrices prepared by compression and by casting) containing pilocarpine (Pi) or tropicamide (Tr) was evaluated for muco-adhesion, for ocular retention and for biological activity (miosis, mydriasis) in rabbits. The muco-adhesive properties were investigated in vitro using a tensile apparatus with mucin-coated surfaces, while the ocular behaviour was estimated visually, using vehicles containing a fluorescent marker. Good to excellent muco-adhesive properties were detected in the HA preparations. The bioavailability-enhancing effect, however, was not very satisfactory with Pi, probably on account of the high solubility and diffusivity of the drug. The effect was more evident with the less soluble drug Tr. The validity of the method used for evaluating bioadhesion, and the relevance of the physicochemical characteristics of the drug to a muco-adhesive ocular delivery system are discussed.